AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method for controlling a pump station, that comprises at least two pumps, each of the at least two pumps being arranged to transfer liquid a pump included in the pump station transferring liquid from or into a tank and said pump being controlled by an electric drive comprising a frequency converter, the method comprising operating the at least two pumps in turns through the step steps of:

- measuring the a liquid surface level of a liquid in the tank by means of a sensor (205),

- controlling the activation each of the two pumps pump on the basis of the measured liquid surface level (206-213),

- selecting a first value of the liquid surface level,

- selecting as the a first value of the first pump rotation speed of the pump substantially the a value at which the an amount of transferred liquid relative to the consumed energy is at maximum and

- monitoring the detecting a moment when the liquid surface level reaches said first value of the liquid surface level from a predetermined direction, (206) and

– controlling, as a consequence of this detection, the pump rotation speed of one of said at least two pumps to said first value (204, 207) of the pump rotation speed, and

– said monitoring of the liquid surface level and control the controlling of the pump rotation speed, said monitoring being performed in a the frequency converter,

wherein said at least two pumps are controlled at the pump station in such a way that said at least two pumps are alternated in operating turns in which the pump rotation speed is said first value of the pump rotation speed.

2. (currently amended) A method as defined in claim 1, characterised in that a wherein the tank is filled by means of a pump at a said at least two pumps at the pump station, said predetermined direction being is from [[the]] a top towards [[the]] a bottom of the tank.

3. (currently amended) A method as defined in claim 1, characterised in that a wherein the tank is emptied by means of a pump at a said at least two pumps at the pump station, said predetermined direction being from [[the]] a bottom towards [[the]] a top.

4. (currently amended) A method as defined in claim 1, characterised in wherein one of said at least two pumps is a

currently operating pump, and the method further comprises selecting a second value ~~(202)~~ of the pump rotation speed ~~of the pump~~ and ~~in monitoring the~~ detecting a moment at which the liquid surface level reaches ~~the following~~ a second value ~~(208)~~ of the liquid surface level from said predetermined direction, and as a consequence of this detection, controlling the pump rotation speed of the currently operating pump ~~is controlled~~ to [[a]] the second value ~~(204, 209)~~ of the pump rotation speed.

5. (currently amended) A method as defined in claim 4, **characterised** ~~in that~~ wherein said second value of the pump rotation speed is the maximum rotation speed.

6. (canceled)

7. (currently amended) A method as defined in claim [[1]] 4, **characterised** ~~in that at least two pumps (M1, M2, M3) are controlled at the pump station and~~ wherein the method further comprises selecting a third value of the pump rotation speed ~~is selected~~, and detecting while [[the]] a first pump, of said at least two pumps, is operating, [[the]] a moment ~~is monitored~~ at which the liquid surface level reaches a third value [[(B)]] of the liquid surface level from said predetermined direction, and activating as a consequence of this detection, [[the]] a second pump, of said at least two pumps, ~~(M2) is also activated~~ that is

not currently operating to operate at said third value of the pump rotation speed.

8. (currently amended) A method as defined in claim 1, **characterised** in that said predetermined at least one wherein said first value of the liquid surface level and at least one the first value of the pump rotation speed are stored in the frequency converter of the pump station.

9. (currently amended) A method as defined in claim 1, **characterised** in that wherein said measurement of the liquid surface level is performed in the frequency converter on the basis of a signal received from [[the]] a surface level sensor.

10. (currently amended) A method as defined in claim 1, **characterised** in that wherein an alarm signal is received from [[the]] an alarm sensor of each of the pump at least two pumps and the pump is controlled on the basis of the received alarm signal received from that pump.

11. (currently amended) A method as defined in claim 1, **characterised** in that wherein an alarm function is performed when the liquid surface level exceeds a selected alarm limit value.

12. (currently amended) A method as defined in claim 1, **characterised** ~~in that at least one selected~~ wherein the method further comprises varying the first value of the liquid surface ~~level is varied~~ in order to avoid that solid constituents in the liquid gather on the wall of the tank at ~~the selected~~ any fixed surface level.

13. (currently amended) A frequency converter ~~(420)~~ for ~~the electric drive of~~ a pump station, the pump station comprising a liquid tank ~~(460)~~, ~~a pump (440)~~ at least two pumps and [[an]] electric ~~drive (401, 420, 430)~~ drives for actuating the ~~pump~~ at least two pumps, **characterised** ~~in that~~ the frequency converter ~~(420) comprises~~ comprising:

        - means ~~(422)~~ for storing a first value of [[the]] liquid surface level,

        - means ~~(422)~~ for storing a first value of [[the]] pump rotation speed ~~of the pump~~, the first value of the pump rotation speed being substantially a value at which an amount of transferred liquid relative to consumed energy is at maximum,

        - means ~~(423)~~ for measuring the liquid surface level on the basis of a signal received from [[the]] a sensor ~~(452)~~,

        - means ~~(421)~~ for detecting [[the]] a moment when the liquid surface level reaches said first value of the liquid surface level from a predetermined direction, ~~and~~

_ means (420) for controlling the pump rotation speed of one of the ~~pump~~ at least two pumps to said first value of the pump rotation speed as a consequence of said detection ~~so that said first value of the rotation speed is substantially the value at which the amount of transferred liquid relative to the consumed energy is at maximum~~, and

– means for controlling the at least two pumps in such a way that said at least two pumps are alternately in such operating turns in which the pump rotation speed is said first value of the pump rotation speed, wherein the means for controlling comprises means for transmitting control data to one or more other frequency converters of the pump station for controlling the operating turns of the at least two pumps.

14-15. (canceled)

16. (currently amended) A frequency converter as defined in claim 13, **~~characterised~~** ~~in~~ comprising means (422) for storing [[the]] a second value of the pump rotation speed and means (421) for ~~monitoring the~~ detecting a moment the liquid surface level reaches ~~the following~~ a second value of the liquid surface level from said predetermined direction, and means (420) for controlling the pump rotation speed of the pump currently operating to [[a]] the second value of the pump rotation speed as a consequence of this detection.

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17. (currently amended) A frequency converter as defined in claim 16, ~~**characterised** in that~~ <u>wherein</u> said second value of the <u>pump</u> rotation speed is the maximum rotation speed.

18-19. (canceled)

20. (currently amended) A frequency converter as defined in claim 18, ~~**characterised** in~~ comprising means for <u>at least one of</u> transmitting <u>and receiving data indicating the liquid</u> surface level ~~data~~ to [[the]] <u>another</u> frequency converter ~~of a second pump and/or for receiving surface level data from the frequency converter of a second pump~~.

21. (currently amended) A frequency converter as defined in claim 13, ~~**characterised** in~~ comprising a memory unit ~~(422)~~ for storage of said ~~predetermined at least one~~ <u>first</u> value of the <u>liquid</u> surface level and ~~of at least one~~ <u>the first</u> value of the <u>pump</u> rotation speed and also for storage of a program <u>for</u> controlling the electric drive.

22. (currently amended) A frequency converter as defined in claim 13, ~~**characterised** in~~ comprising a measurement unit ~~(423)~~ for receiving a signal from the ~~surface level~~ sensor

(452) and for determining the liquid surface level on the basis of the received signal.

23. (currently amended) A frequency converter as defined in claim 13, ~~characterised in~~ comprising a terminal for connecting the ~~surface level~~ sensor.

24. (currently amended) A frequency converter as defined in claim 13, ~~characterised in~~ comprising a processor ~~(421)~~ for controlling the electric ~~drive~~ drives on the basis of data indicating the liquid surface level ~~data~~ and on the basis of [[the]] a program ~~that controls~~ for controlling the processor.

25. (currently amended) A frequency converter as defined in claim 13, ~~characterised in~~ comprising means for receiving an alarm signal from [[the]] alarm ~~sensor~~ sensors of the ~~pump~~ at least two pumps and means for controlling the ~~pump~~ at least two pumps on the basis of the received alarm signal.

26. (currently amended) A frequency converter as defined in claim 13, ~~characterised in~~ comprising means for performing an alarm function if the liquid surface level exceeds a predetermined alarm limit value or if an alarm signal has been received from [[the]] an alarm sensor of ~~the pump~~ any of the at least two pumps.

27. (currently amended) A frequency converter as defined in claim 13, ~~characterised in~~ comprising software stored in the frequency converter for controlling the frequency converter to perform at least one of the following functions:

- measurement of the liquid surface level on the basis of a signal from the sensor and control of the rotation speed of the pump on the basis of the liquid surface level,

- variation of ~~at least one selected~~ the first value of the liquid surface level in order to avoid that solid ingredients in the liquid gather on the wall of the tank at ~~the selected~~ any fixed surface level[[;]],

- ~~coordination of the control of at least two pumps so that the pumps are activated in turns,~~

- performing an alarm function when the liquid surface level exceeds a predetermined alarm limit value, and

- monitoring ~~the~~ alarm signals received from [[the]] alarm sensors of the ~~pump~~ at least two pumps and controlling the ~~pump~~ at least two pumps on the basis of the alarm signals.